



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,010	07/23/2003	Hiroshi Hirayama	16869P-079200US	9954

20350 7590 12/18/2006
TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

PATEL, GAUTAM

ART UNIT	PAPER NUMBER
----------	--------------

2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/626,010

Applicant(s)

HIRAYAMA, HIROSHI

Examiner

Gautam R. Patel

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This is in response to amendment filed on 10/27/06.
2. claims 1-20 remain for examination.

CLAIM OBJECTION

3. The amendment filed 10/27/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the concept of track reproduction signal being recorded by an irradiated laser beam is not disclosed in the specification. Also the remarks which are supposed to point to new amended material in the specification does not point to this added material as to where it is located in the specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 U.S.C. § 112

4. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Paragraph 32, simply states that “a track reproduction signal, a string of recording marks formed on the track and at the end of the paragraph it states that laser driver 15 generates a recording pulse used for forming a recording mark on the track”. The specification does not disclose at all that “that the track reproduction signal is recorded by an irradiated laser beam”.

Claim Rejections - 35 U.S.C. § 102

Art Unit: 2627

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5, 8, 11-12, 15 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Tetsushi JPO Publication 11-045514 (hereafter Tetsushi).

As to claim 1, Tetsushi discloses the invention as claimed, a disk recording apparatus [see Figs. 1 and 2-4] including a first timing detector, a second timing detector, a phase difference detector and a controller configured, comprising:

a first timing [[fig. 1, unit 19] detector having a first timing synchronized with a wobble reproduction signal of the rewritable optical disk;

a second timing detector [fig. 1, unit 27] having a second timing synchronized with a track reproduction signal of the rewritable optical disk;

a phase difference detector [fig. 1, unit 26] configured to detect a phase difference between the first timing and the second timing; and

a controller [fig. 1, unit 23] configured to determine a recording area based on the detected phase difference [paragraphs 36-44 & 51-55 also fig. 1].

Wherein said track reproduction signal is recorded by an irradiated laser beam [paragraphs 36-44 & 51-55 also fig. 1].

NOTE: It should be pointed out that ALL signal inherently are recorded by the laser beam on these kind of optical discs including track reproduction signal that were recorded.

6. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Tetsushi:

the controller is configured to control writing of data on the determined recording area of the optical disk [paragraphs 36-44 & 51-55 also fig. 1].

7. The aforementioned claim 5, recites the following elements, inter alia, disclosed in Tetsushi:

if the controller determines that the recording area for writing the data is a preset reserved area or an empty area on the optical disk, the controller is configured to control the writing of the data using the first timing synchronized with the wobble reproduction signal of the rewritable optical disk [paragraphs 36-44 & 51-55 also fig. 1].

NOTE: Controller inherently records on an empty area so as not to destroy data that has already been written.

8. As to claims 8, 11 and 18, they are claims corresponding to claim 1 and they are therefore rejected for the similar reasons set forth in the rejection of claim 1, above.

9. As to claim 12 it is claim corresponding to claim 2 and it is therefore rejected for the similar reasons set forth in the rejection of claim 2, above.

10. As to claim 15 it is claim corresponding to claim 5 and it is therefore rejected for the similar reasons set forth in the rejection of claim 5, above.

ALTERNATE REJECTION

Claim Rejections - 35 U.S.C. § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 5, 8, 11-12, 15 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bokui US patent 6,674,330 (hereafter Bokui).

As to claim 1, Bokui discloses the invention as claimed, a disk recording apparatus [see Figs. 1 and 2-4] including a first timing detector, a second timing detector, a phase difference detector and a controller configured, comprising:

a first timing [fig. 1, signal Wobble signal] detector having a first timing synchronized with a wobble reproduction signal of the rewritable optical disk;

a second timing detector [fig. 1, signal Pre-pit signal] having a second timing synchronized with a track reproduction signal of the rewritable optical disk;

a phase difference detector [fig. 1, unit 5] configured to detect a phase difference between the first timing and the second timing; and

a controller [inherently present] configured to determine a recording area based on the detected phase difference [col. 2, line 60 to col. 3, line 63; & col. 4, lines 42-51].

Wherein said track reproduction signal is recorded by an irradiated laser beam [col. 2, line 60 to col. 3, line 63; & col. 4, lines 42-51].

NOTE: It should be pointed out that ALL signal inherently are recorded by the laser beam on these kind of optical discs including track reproduction signal that were recorded.

12. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Tetsushi:

the controller is configured to control writing of data on the determined recording area of the optical disk [col. 2, line 60 to col. 3, line 63; & col. 4, lines 42-51].

13. The aforementioned claim 5, recites the following elements, inter alia, disclosed in Tetsushi:

if the controller determines that the recording area for writing the data is a preset reserved area or an empty area on the optical disk, the controller is configured to control the writing of the data using the first timing synchronized with the wobble reproduction signal of the rewritable optical disk [col. 2, line 60 to col. 3, line 63; & col. 4, lines 42-51].

NOTE: Controller inherently records on an empty area so as not to destroy data that has already been written.

14. As to claims 8, 11 and 18, they are claims corresponding to claim 1 and they are therefore rejected for the similar reasons set forth in the rejection of claim 1, above.

Art Unit: 2627

15. As to claim 12 it is claim corresponding to claim 2 and it is therefore rejected for the similar reasons set forth in the rejection of claim 2, above.

16. As to claim 15 it is claim corresponding to claim 5 and it is therefore rejected for the similar reasons set forth in the rejection of claim 5, above.

Possible Allowable Subject Matter

17. Claims 3-4, 6-7, 9-10, 13-14, 16-17 and 19-20 are objected as being dependent upon a rejected base claim, but would be allowable [subject to overcoming 112 first and objection to claims] if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

NOTE: Claims 3-4, 6-7, 9-10, 13-14, 16-17 and 19-20 are allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a disk recording apparatus for rewritable disk which includes first second timing detectors, phase comparator a controller which includes “details of permissible cycle errors value wT and also; an amount of error data relative to the track reproduction signal”. It is noted that the closest prior art, Tetsushi [JPO11-045514] & Bokui (US 6,674,330) shows a similar apparatus which discloses all of the above elements including first and second timing detectors an phase detector. However Tetsushi and Bokui fails to disclose details as described above with respect to cycle error value and an amount of error relative to rack

NOTE: It should also be noted that US patent 6,687,204 also clearly discloses reproduction signal [fig.1, unit 12], and wobble signal [fig. 1, unit 13], but fails to disclose details just described above.

18. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new grounds of rejection.

19. Applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

Art Unit: 2627

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact information

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



**GAUTAM R. PATEL
PRIMARY EXAMINER**

Gautam R. Patel
Primary Examiner
Group Art Unit 2627

December 12, 2006